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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/711,820	10/07/2004	Robert P. Rouen	68.0496	5819
35204 7590 08/10/2007 SCHLUMBERGER RESERVOIR COMPLETIONS 14910 AIRLINE ROAD			EXAMINER	
			ANDREWS, DAVID L	
ROSHARON,	TX 7/583		. ART UNIT	PAPER NUMBER
			3672	
			MAIL DATE	DELIVERY MODE
			08/10/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

		Application No.	Applicant(s)				
Office Action Summary		10/711,820	ROUEN, ROBERT P.				
		Examiner	Art Unit				
		David Andrews	3672				
Period fo	The MAILING DATE of this communication app or Reply	ears on the cover sheet with the	correspondence address				
WHIC - Exter after - If NC - Failu Any	ORTENED STATUTORY PERIOD FOR REPLY CHEVER IS LONGER, FROM THE MAILING DANSIONS of time may be available under the provisions of 37 CFR 1.13 SIX (6) MONTHS from the mailing date of this communication. Poperiod for reply is specified above, the maximum statutory period ver to reply within the set or extended period for reply will, by statute reply received by the Office later than three months after the mailing ed patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATIO 36(a). In no event, however, may a reply be ti vill apply and will expire SIX (6) MONTHS fror , cause the application to become ABANDON	N. mely filed  n the mailing date of this communication. ED (35 U.S.C. § 133).				
Status							
1)	Responsive to communication(s) filed on 25 M	av 2007					
· · · · · · · · · · · · · · · · · · ·		action is non-final.					
′=	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is						
,	closed in accordance with the practice under E	·					
Dispositi	on of Claims						
4) 又	Claim(s) <u>1-16,18-20 and 22-24</u> is/are pending	in the application.					
	4a) Of the above claim(s) is/are withdrawn from consideration.						
	5) Claim(s) is/are allowed.						
·	☐ Claim(s) <u>1-16,18-20 and 22-24</u> is/are rejected.						
7)	Claim(s) is/are objected to.						
8)□	Claim(s) are subject to restriction and/or	r election requirement.					
; Applicati	on Papers						
9)□:	The specification is objected to by the Examine	r					
•	The drawing(s) filed on <u>07 October 2004</u> is/are:		d to by the Examiner				
,—	Applicant may not request that any objection to the		·				
	Replacement drawing sheet(s) including the correct	ion is required if the drawing(s) is of	pjected to. See 37 CFR 1.121(d).				
11)	The oath or declaration is objected to by the Ex	aminer. Note the attached Office	e Action or form PTO-152.				
Priority u	ınder 35 U.S.C. § 119						
_	Acknowledgment is made of a claim for foreign ☐ All b)☐ Some * c)☐ None of:	priority under 35 U.S.C. § 119(a	a)-(d) or (f).				
/-	1. Certified copies of the priority documents have been received.						
	2. Certified copies of the priority documents have been received in Application No						
	3. Copies of the certified copies of the prior	ity documents have been receiv	ed in this National Stage				
	application from the International Bureau	ı (PCT Rule 17.2(a)).					
* S	see the attached detailed Office action for a list	of the certified copies not receive	ed.				
,							
Attachment		<b>∆</b> □ 1-1-1-1-1-0	·/DTO 440)				
	e of References Cited (PTO-892) e of Draftsperson's Patent Drawing Review (PTO-948)	4) Interview Summary Paper No(s)/Mail D					
3) 🔲 Inform	nation Disclosure Statement(s) (PTO/SB/08) r No(s)/Mail Date	5) Notice of Informal F	Patent Application				

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### **DETAILED ACTION**

The amendment filed 5/25/2007 has been entered.

## Response to Arguments

Applicant's arguments with respect to claims 1-23 have been considered but are most in view of the new ground(s) of rejection.

## Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-13, 15, and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over McCulloch (US 2,798,558) in view of Pryor (US 2,725,014).

McCulloch discloses a gas injection apparatus comprising: a tuibular member (34) defining an axial bore therethrough and adapted to deliver a gas into a wellbore proximate a perforation interval via orifices (71); a sealing mechanism to seal above the perforation interval (19), wherein the tuibular member engages the sealing mechanism (figure 1); wherein the sealing mechanism is a dual-port packer (figure 1); wherein the perforation interval is within a gas or oil bearing well (col. 2, lines 14-20); a retrieving element (36); a tubular string to produce fluid from the perforation interval via one port in the sealing mechanism (15). McCulloch does not disclose gas lift valves on the orifices.

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Pryor discloses an apparatus for gas lift injection comprising a plurality of gas lift valves (16, 17, 18, 19, or 23, 24, 25, 26) to regulate communication between the axial bore of the tubular member to the wellbore (col. 4, lines 2-7). It would have been obvious to one of ordinary skill in the art at the time of invention to utilize the valves of Pryor on the system of McCulloch in order to provide actuation control to regulate the orifices (col. 2, lines 16+).

Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over McCulloch in view of Pryor and further in view McCarvell et al. (US 3,192,869).

McCulloch discloses a gas lift system comprising: a dual-port packer (19); a tubing string adapted to deliver gas (15); and an injection tool (21) with a plurality of gas injection sites at or below the perforation interval. McCulloch does not disclose valves on the string or the injection tool. Pryor discloses gas lift valves (16, 17, 18, 19, or 23, 24, 25, 26) to deliver gas into a wellbore (col. 4, lines 2-7). McCarvell et al. discloses a valve (V-1) on a production tubing string that is actuated in response to gas pressure in the a well annulus exceeding a predetermined lever (col. 6, lines 1-18). It would have been obvious to one of ordinary skill in the art at the time of invention to modify the system of McCulloch with the gas lift valves of Pryor and the pressure regulated opening tubing string valve of Peter in order to provide actuation control to regulate the injection of gas through the tool and to maintain pressure within the production string unless gas lift pressure is sufficient to aid the lifting of fluids.

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Claims 16, 18-20, 22 and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over McCulloch in view of Pryor, as applied to claims 1, 7, and 13 above and further in view McCarvell et al. McCulloch and Pryor disclose all the limitations of these claims, with Pryor additionally disclosing that each valve opened while the others are closed (individual actuation, col. 3, lines 4-22). McCulloch and Pryor do not disclose that the valves to be actuated in response to different gas pressures within the annulus. McCarvell teaches a series of gas lift valves (V-1, V-2, V-3) that are actuated at a first, second and third pressures (col. 4, lines 1-29) sequentially. It would have been obvious to one of ordinary skill in the art at the time of invention to combine the systems of McCulloch with gas pressure actuation teachings of McCarvell in order to provide automated means of controlling the valves so they only open upon sufficient gas lift pressure available.

#### Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to David Andrews whose telephone number is (571) 272-6558. The examiner can normally be reached on Monday-Thursday, 7:30am-5pm and alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Bagnell can be reached on (571) 272-6999. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

David Bagnell

Supervisory Patent Examiner

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DLA 8/6/07